

Title (en)

Method and apparatus for stripping holes in a metal substrate

Title (de)

Verfahren und Vorrichtung zur Ablösung von Löchern in Metallsubstraten

Title (fr)

Procédé et dispositif de décapage de trous dans un substrat métallique

Publication

EP 2123788 A3 20101027 (EN)

Application

EP 09251213 A 20090429

Priority

- US 12584708 P 20080429
- US 38669009 A 20090422

Abstract (en)

[origin: US2009270014A1] A method and apparatus for stripping foreign matter from holes in a substrate, such as a turbine component, which includes using a scanner to locate the hole and operating a water jet apparatus to direct a water jet or an abrasive water jet into the hole for stripping. A CAD model of the original turbine component may be used in the control system of the water jet apparatus to initially locate the scanner at the general or theoretical location of the hole. A reverse flow of low pressure water may be provided to further clear foreign matter from the hole.

IPC 8 full level

C23C 4/18 (2006.01); **B08B 3/02** (2006.01); **B08B 9/00** (2006.01); **B24C 1/04** (2006.01)

CPC (source: EP US)

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Citation (search report)

- [XYI] EP 1510283 A1 20050302 - ALSTOM TECHNOLOGY LTD [CH]
- [X] US 6723951 B1 20040420 - MCGRAW JULIE M [US]
- [YD] US 6905396 B1 20050614 - MILLER MITCH O [US], et al
- [YA] US 2002076326 A1 20020620 - ZABALA ROBERT JOHN [US], et al
- [Y] EP 1557240 A1 20050727 - KRATZMAIER KONSTRUKTIONEN GMBH [DE]
- [A] EP 1739410 A1 20070103 - UNITED TECHNOLOGIES CORP [US]
- [A] EP 1859896 A1 20071128 - ROLLS ROYCE PLC [GB]
- [A] EP 1291142 A2 20030312 - GEN ELECTRIC [US]

Cited by

EP2881816A3; EP2719494A1; EP2301730A1; US9527116B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

US 2009270014 A1 20091029; **US 8380338 B2 20130219**; EP 2123788 A2 20091125; EP 2123788 A3 20101027; SG 156600 A1 20091126

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